1 ABSTRACT

- 2 A high speed communications interface divides data into a
- 3 plurality of lanes, each lane encoded with clocking
- 4 information, serialized, and sent to an interface. During
- 5 cycles when there is no available data to send, IDLE EVEN
- 6 and IDLE_ODD cells are sent on alternating cycles. Data is
- 7 transmitted by sending a header which spans all lanes and
- 8 includes a START symbol. The final data transaction
- 9 includes a Frame Check Sequence (FCS) which operates over
- 10 the entire header and data. The packet is terminated by an
- 11 END symbol, which is sent after the final data, and the
- 12 remainder of the lanes are padded with IDLE_EVEN, IDLE ODD,
- 13 IDLE_EVEN_BUSY, or IDLE_ODD_BUSY cycles. The interface has
- 14 a variable clock rate.